MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2018/2019

MVR 2013 – BEHAVIOURAL MODELLING
(All sections / Groups)

06 MARCH 2019
9.00 a.m. - 11.00 a.m.
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This Question paper consists of 5 pages with 10 objective questions and 12 subjective questions only.

2. Answer **ALL** questions in section **A** and **C**. Answer **FIVE** out of **SEVEN** question in section **B**. All questions carry equal marks and the distribution of the marks for each question is given.

3. Please write all your answers in the Answer Booklet provided.

Section A
Objective Questions

(Total: 10 Marks)

1. Which one of these is not the advantage of unity editor?
   A. Flexible and highly extendible
   B. Pause at anytime to inspect and debug
   C. Allow for fast iterations (preview in play mode)
   D. No programming language needed

2. Which one of these is not included in Primitive Shapes for Collider?
   A. Box
   B. Sphere
   C. Capsule
   D. Cone

3. Which one of these components is not included in Unity 3D?
   A. Scene view
   B. Project Window
   C. Canvas Window
   D. Hierarchy

4. Rigidbody components are include these following properties. except?
   A. Mass
   B. Capacity
   C. Gravity
   D. Friction

5. How to access audio from scene hierarchy?
   A. public GameObject AudioName;
   B. public Audio AudioName;
   C. public private AudioName;
   D. public AudioSource AudioName;

Continued ....

6. Which objects not require RigidBody component?
    A. Player
    B. Enemy
    C. Ball
    D. Wall

7. What is the use of RigidBody?
    A. To create movement
    B. To create realistic motions
    C. To create beautiful scene
    D. To make gameObject more interesting

8. When does the function OnCollisionExit () runs in the game?
    A. When the collider has detecting another collider
    B. When the other collider touch the trigger
    C. When the collider has stopped touching another collider
    D. When the other collider exits the trigger

9. Which function is called when collider/rigidbody has begun touching another collider/ RigidBody?
    A. OnTriggerEnter
    B. OnTriggerBegin
    C. OnCollisionEnter
    D. OnCollisionTouch

10. Which one of these lines will cause an Error that will make it unable to PLAY?
    A. public GameObject nameObject;
    B. private RigidBody rb;
    C. public int score = 0;
    D. public float speed = 10.5;

Section B
Subjective Questions

Answer any 5 (FIVE) questions ONLY.

(Total: 10 Marks)

1. Can two GameObjects, each with only a sphere collider, both set as trigger and raise Ontrigger events? Explain your answer?

(2 Marks)

2. In Unity 3D how can you hide GameObjects using script?

(2 Marks)

3. Explain why Time.deltatime should be used to make things that depend on time operation correctly.

(2 Marks)

4. Describe what is Scene View components of Unity3D,

(2 Marks)

5. Describe what is Update message in Unity3D.

(2 Marks)

6. Describe what is Start message in Unity3D.

(2 Marks)

7. Explain what is Prefabs in Unity 3D.

(2 Marks)

Section C
Subjective Questions

(Total: 20 Marks)

Answer all questions.
Write down the Function Scripts for the following actions:

1. Write C# Script to move an object with the keyboard input Right, Left, Up and Down.

(4 Marks)

2. Moves a GameObject point location in a straight line towards a target point (MoveTowards).

(4 Marks)

3. Have objects to appear in random spots at the start of your game. Uses arrays and random numbers.

(3 Marks)

4. Player will add 1 score every time it collides with Diamond object.

(3 Marks)

5. Have a GameObject that can be triggered when any GameObject that has the tag "Enemy" enter it, minus 0.1 to a variable called 'Health' with the full health is 1, and if 'Health' reaches 0, turn on a canvas game over and play the gameover sound.

(6 Marks)

End of Page.